

WHAT IS CLAIMED IS:

1. A method in a communication device for handover from a first radio access network to a second radio access network, the first radio access network using a different mode of communication from the second radio access network, the method comprising:

entering an ongoing communication on the first radio access network;  
detecting the presence of a second radio access network, the second radio access network being uncoordinated with the first radio access network;

sending a transfer request to the second radio access network requesting transfer of the ongoing communication from the first radio access network to the second radio access network; and

transferring the ongoing communication from the first radio access network to the second radio access network.

2. The method according to claim 1, wherein the first radio access network is a cellular radio access network and wherein the second radio access network is a wireless local area network.

3. The method according to claim 1, wherein the second radio access network is not associated with the first radio access network by the first radio access network not initially having information on the second radio access network.

4. The method according to claim 1, further comprising:  
registering the communication device on the second radio access network;  
and

transmitting information from the communication device to the second radio access network indicating the communication device is actively in an ongoing communication on the first radio access network.

5. A method in a radio access network for handover from a first radio access network to a second radio access network, the first radio access network using a different mode of communication from the second radio access network, the method comprising:

- 5                   registering a communication device on the second radio access network;  
                  receiving information at the second radio access network from the communication device indicating the communication device is actively in an ongoing communication on the first radio access network;  
                  sending a transfer request from the second radio access network to the first radio access network requesting transfer of the ongoing communication from the first  
10                  radio access network to the second radio access network; and  
                  transferring the ongoing communication from the first radio access network to the second radio access network.

6. The method according to claim 5, wherein the ongoing communication  
15                  comprises one of a data session and a call.

7. The method according to claim 5, further comprising receiving a communication at the second radio access network from the communication device, the communication indicating a desire to transfer the ongoing communication from the first  
20                  radio access network to the second radio access network.

8. The method according to claim 7, further comprising sending, to the communication device, an acknowledgement of reception of the communication from the communication device at the second radio access network.

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9. The method according to claim 5, wherein sending a transfer request includes sending a handover request message including a destination identifier of the second radio access network.

10. The method according to claim 5, wherein the ongoing communication  
30                  comprises a connection between the communication device and a connected party.

11. The method according to claim 10, wherein transferring the ongoing communication from the first radio access network to the second radio access network comprises switching the connection between the communication device and the connected party via the first radio access network to a connection between the communication device and the connected party via the second radio access network.

12. The method according to claim 5, further comprising receiving a registration request from a communication device at the second radio access network.

13. The method according to claim 5, wherein the second radio access network comprises a wireless local area network and the first radio access network comprises a cellular radio access network.

14. The method according to claim 5, wherein the second radio access network comprises a cellular radio access network and the first radio access network comprises a wireless local area network.

15. The method according to claim 5, wherein at least one of the first radio access network and the second first radio access network comprises at least one of an 802.11 network, a Bluetooth network, a global system for mobile communication network, a universal mobile telecommunications service network, a code division multiple access network, a time division multiple access network, an analog wireless communication network, a proprietary wireless network, and an 802.16 network.

16. The method according to claim 5, further comprising:  
recognizing transfer of the communication device to the second radio access network based on the communication device appearing on the second radio access network at an appointed frequency and at an appointed time; and  
sending a handover completion message from the second radio access network to the first radio access network.

17. The method according to claim 5, wherein transferring the ongoing communication from the first radio access network to the second radio access network further comprises connecting the ongoing communication between the second radio access network and a connected party via an internet protocol network.

18. The method according to claim 5, wherein transferring the ongoing communication from the first radio access network to the second radio access network further comprises connecting the ongoing communication between the second radio access network and a connected party via a circuit network.

19. The method according to claim 5, wherein transferring the ongoing communication from the first radio access network to the second radio access network further comprises connecting the ongoing communication between the second radio access network and a connected party via a network portion of the first radio access network and a radio portion of the second radio access network.

20. The method according to claim 5, wherein transferring the ongoing communication from the first radio access network to the second radio access network further comprises bypassing the first radio access network.

21. A method in a radio access network for handover from a first radio access network to a second radio access network, the first radio access network using a different mode of communication from the second radio access network, the method comprising:

establishing an ongoing communication with the communication device on the first radio access network;

receiving a transfer request from the second radio access network to the first radio access network requesting transfer of the ongoing communication from the first radio access network to the second radio access network; and

transferring the ongoing communication from the first radio access network to the second radio access network.

22. The method according to claim 21, wherein the second radio access network comprises a wireless local area network and the first radio access network comprises a cellular radio access network, and

5 wherein the ongoing communication comprises at least one of a data session and a call.

23. The method according to claim 21, wherein receiving a transfer request includes receiving a handover request message including a destination identifier of the  
10 second radio access network.

24. The method according to claim 21, wherein the ongoing communication comprises a connection between the communication device and a connected party.

15 25. The method according to claim 24, wherein transferring the ongoing communication from the first radio access network to the second radio access network comprises switching the connection between the communication device and the connected party via the first radio access network to a connection between the communication device and the connected party via the second radio access network.

20 26. The method according to claim 21, wherein the second radio access network and the first radio access network comprise at least one of a wireless local area network and a cellular radio access network.

25 27. The method according to claim 21, further comprising receiving a handover completion message at the first radio access network from the second radio access network.

30 28. The method according to claim 21, wherein transferring the ongoing communication from the first radio access network to the second radio access network further comprises connecting the ongoing communication between the second radio

access network and a connected party via at least one of an internet protocol network and a circuit network.

5           29.     The method according to claim 21, wherein transferring the ongoing communication from the first radio access network to the second radio access network further comprises connecting the ongoing communication between the second radio access network and a connected party via a network portion of the first radio access network and a radio portion of the second radio access network.

10           30.     The method according to claim 21, wherein transferring the ongoing communication from the first radio access network to the second radio access network further comprises bypassing the first radio access network.

31. A communication device for handover from a first radio access network to a second radio access network, the first radio access network using a different mode of communication from the second radio access network, the communication device comprising:

- 5 a transceiver;
- a controller coupled to the transceiver, the controller configured to enter an ongoing communication on the first radio access network;
- a network detection module coupled to the controller, the network detection module configured to detect the presence of a second radio access network, the second radio access network being uncoordinated with the first radio access network;
- 10 a transfer request module coupled to the controller, the transfer request module configured to send a transfer request to the second radio access network requesting transfer of the ongoing communication from the first radio access network to the second radio access network; and
- 15 an ongoing communication transfer module coupled to the controller the ongoing communication transfer module configured to transfer the ongoing communication from the first radio access network to the second radio access network.

32. The communication device according to claim 31, wherein the first radio access network is a cellular radio access network and wherein the second radio access network is a wireless local area network.

33. The communication device according to claim 31, wherein the second radio access network is not associated with the first radio access network by the first radio access network not initially having information on the second radio access network.

34. The communication device according to claim 31, wherein the controller is further configured to register the communication device on the second radio access network and transmit information from the communication device to the second radio access network indicating the communication device is actively in an ongoing communication on the first radio access network.

35. A controller in a radio access network for handover from a first radio access network to a second radio access network, the first radio access network using a different mode of communication from the second radio access network, the controller comprising:

5 a registration module configured to register a communication device on the second radio access network;

an ongoing communication determination module configured to receive information at the second radio access network from the communication device indicating the communication device is actively in an ongoing communication on the first  
10 radio access network;

a transfer request communication module configured to send a transfer request from the second radio access network to the first radio access network requesting transfer of the ongoing communication from the first radio access network to the second radio access network; and

15 a handover module configured to transfer the ongoing communication from the first radio access network to the second radio access network.

36. The controller according to claim 35, wherein the registration module is further configured to receive a communication at the second radio access network from  
20 the communication device, the communication indicating a desire to transfer the ongoing communication from the first radio access network to the second radio access network.

37. The controller according to claim 35, wherein the transfer request communication module is further configured to send a transfer request including a  
25 handover request message including a destination identifier of the second radio access network.



38. A controller in a radio access network for handover from a first radio access network to a second radio access network, the first radio access network using a different mode of communication from the second radio access network, the controller comprising:

5 a communication connection module configured to establish an ongoing communication with the communication device on the first radio access network;

a transfer request module configured to receive a transfer request from the second radio access network to the first radio access network requesting transfer of the ongoing communication from the first radio access network to the second radio access network; and

10 a communication transfer module configured to transfer the ongoing communication from the first radio access network to the second radio access network.

39. The controller according to claim 38, wherein the second radio access network comprises a wireless local area network and the first radio access network comprises a cellular radio access network, and

15 wherein the ongoing communication comprises one of a data session and a call.

40. The controller according to claim 38, wherein the transfer request includes a handover request message including a destination identifier of the second radio access network.

41. The controller according to claim 38, wherein the ongoing communication comprises a connection between the communication device and a connected party.

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